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Assignee: Intel Corporation

Amendments to the Claims:

The following Listing of Claims replaces all prior versions and Listings of Claims in the application:

Listing of Claims:

1. (Currently Amended) A method comprising:
~~performing processing operations at a first clock rate during at least part of a first time period in which signals are received and stored by a Radio Frequency module; and~~
~~performing background processing operations at a second, faster clock rate during a second time period in which said Radio Frequency module is de-activated.~~
~~searching for a communication channel by activating a receiver having a radio frequency (RF) module and a baseband module for storing a portion of received signals within a first time period, de-activating said RF module of said receiver, and background processing said portion of said received signals with a variable clock rate within a second time period.~~
2. (Currently Amended) The method according to claim 1 wherein ~~said processing performing background processing operations~~ comprises processing spread spectrum signals.
3. (Currently Amended) The method according to claim 1 wherein ~~said processing performing background processing operations~~ comprises processing Code Division Multiple Access (CDMA) information.
4. (Currently Amended) The method according to claim 1 wherein ~~said processing performing background processing operations~~ comprises performing at least one of synchronizing pseudorandom noise (PN) offset of ~~said portion of~~ said received

signals, searching for at least one neighboring communications cell and searching for at least one candidate communications cell.

5. (Currently Amended) The method according to claim 4 wherein ~~said~~ synchronizing comprises detecting a current pseudorandom noise (PN) offset of said ~~portion of said~~ received signals, and, if different from a previous PN offset, shifting to the current PN offset.
6. (Currently Amended) The method according to claim 1 ~~wherein the searching is performed while continuing to receive a currently received communications carrier comprising receiving a carrier during at least part of said second time period.~~
7. (Currently Amended) The method according to claim 1 ~~and further~~ comprising receiving said received signals in at least one wake period of a slotted mode.
8. (Currently Amended) The method according to claim 7 ~~and further~~ comprising reducing the power consumed during said at least one wake period after recording ~~said portion of said~~ received signals.
9. (Cancelled)
10. (Currently Amended) A receiver comprising:
a Radio Frequency (RF) module adapted to store at least a portion of received signals during a first time period and to be de-activated during a second time period; and
a processor adapted to operate at a first clock rate during at least part of said first time period, and to perform background processing of at least said portion of received signals at a second, faster clock rate during at least part of said second time period.

~~a radio frequency (RF) module and a baseband module, said RF module being adapted for storing a portion of received signals; and a processor having a variable clock, adapted to de-activate said RF module of said receiver, and to perform background processing of said portion of said received signals with a variable clock rate.~~

11. (Currently Amended) The receiver according to claim 10 wherein said RF module[[s]] comprises a memory device adapted for storing therein said portion of received signals, and said processor comprises a digital processing unit, wherein said memory device is adapted to input said portion of received signals to said digital processing unit.
12. (Currently Amended) The receiver according to claim 10 wherein said RF module[[s]] comprises a memory device adapted for storing therein said portion of received signals, and said processor comprises a rake receiver and search engine, wherein said memory device is adapted to input said portion of received signals to said rake receiver and search engine.
13. (Currently Amended) The receiver according to claim 11 ~~and further~~ comprising a sampling unit adapted to receive said portion of the received signals and to input said portion of the received signals to said memory device.
14. (Currently Amended) The receiver according to claim 12 ~~and further~~ comprising a sampling unit adapted to receive said portion of the received signals and to input said portion of the received signals to said memory device.
15. (Currently Amended) A cellular communication system comprising:
a Radio Frequency (RF) module adapted to store at least a portion of received signals during a first time period and to be de-activated during a second time period; and

a processor adapted to operate at a first clock rate during at least part of said first time period, and to perform background processing of at least said portion of received signals at a second, faster clock rate during at least part of said second time period.

~~a receiver comprising a radio frequency (RF) module and a baseband module, said RF module being adapted for storing a portion of received signals; and a processor adapted to de-activate said RF module of said receiver and to process said portion of said received signals offline.~~

16. (Currently Amended) The cellular communication system according to claim 15 wherein said RF module[[s]] comprises a memory device adapted for storing therein said portion of received signals, and said processor comprises a digital processing unit, wherein said memory device is adapted to input said portion of received signals to said digital processing unit.
17. (Currently Amended) The cellular communication system according to claim 15 wherein said RF module[[s]] comprises a memory device adapted for storing therein said portion of received signals, and said processor comprises a rake receiver and search engine, wherein said memory device is adapted to input said portion of received signals to said rake receiver and search engine.
18. (Currently Amended) The cellular communication system according to claim 16 and further comprising a sampling unit adapted to receive said portion of the received signals and to input said portion of the received signals to said memory device.
19. (Currently Amended) The cellular communication system according to claim 17 and further comprising a sampling unit adapted to receive said portion of the received signals and to input said portion of the received signals to said memory device.